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CASE 33314

EV 706063382 S430/2006

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6/30/2006 7 5 200

Express Mail Label Number

Date of Deposit



IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

IN RE PCT NATIONAL STAGE APPLICATION OF

WINDISCH ET AL.

INTERNATIONAL APPLICATION NO: EP/2004009067

FILED: 12 AUGUST 2004

U.S. APPLICATION NO:

35 USC §371 DATE: 13 FEBRUARY 2006

FOR: EXPRESSION VECTORS, TRANSFORMED HOST CELLS, AND

FERMENTATION PROCESS FOR THE PREPARATION OF

RECOMBINANT POLYPEPTIDES

MS: Amendment

Commissioner for Patents PO Box 1450 Alexandria, VA 22313-1450

INFORMATION DISCLOSURE STATEMENT

Sir:

Applicants believe this paper is being filed before the mailing date of a first Office action on the merits, and so under 37 C.F.R. §1.97(b)(3) no fees are required. If a fee is deemed to be required, the Commissioner is hereby authorized to charge such fee to Deposit Account No. 19-0134.

In accordance with 37 C.F.R. §1.56, applicants wish to call the Examiner's attention to the references cited on the attached form(s) PTO-1449.

These references were cited in search reports in corresponding and related applications (10/568,337, 10/568,332 & 10,568,329). Copies of these references and the search report are enclosed herewith.

The Examiner is requested to consider the foregoing information in relation to this application and indicate that each reference was considered by returning a copy of the initialed PTO 1449 form(s).

Respectfully submitted,

Attorney for Applicants Reg. No. 34,940

Novartis Corporate Intellectual Property One Health Plaza, Building 104 East Hanover, NJ 07936-1080 (609) 627-8507

Date: 6/30/2006

- 2 -

FORM PTO-1449 (REV. 7-85) U.S. DEPARTMENT OF COMMERCE PATENT AND TRADEMARK OFFICE

INFORMATION DISCLOSURE CITATION

(Use several sheets if necessary)

ATTY. DOCKET NO. 33314 APPLICATION NO.

APPLICANT
WINDISCH ET AL.
FILING DATE
FEBRUARY 13, 2006

Group

U.S. PATENT DOCUMENTS

EXAMINER INITIAL		DOCUMENT NUMBER	DATE	NAME	CLASS	SUBCLASS	FILING DATE
	AA	5,710,027	1/20/98	Hauptmann et, al			
	AB	2003/0026805	2/6/03	Athwal et,al.			
	AC	5,648,237	7/15/97	Paul J. Carter			
	AD	4,680,262	7/14/87	Bochner et, al.			
	AE	2004/151695	8/5/04	Kwon et al.			
	AF						
	AG						
	АН						
	Al						
	AJ						
	AK						
	AL						

FOREIGN PATENT DOCUMENTS

,		DOCUMENT NUMBER	DATE	OFFICE	CLASS	SUBCLASS	TRAN YES	SLATION NO
	AM	WO 89/00201	1/12/89	University of Dundee				
	AN	WO 03/004599	1/16/03	Insight strategy & Mkt Ltd				
	AO	EP 0 974 654	1/26/00	Mitsui Chemicals Inc				
	AP	WO 01/57217	8/9/01	Choi Ki Doo et al.				
-	AQ							

OTHER DOCUMENTS (Including Author, Title, Date, Pertinent pages, Etc.)

BOURDINEAUD J P ET AL: "Cytoplasmic and Periplasmic Expression of a Synthetic gene for Ferredoxin in Escherichia-coli", Biochimie (Paris), vil.72, no. 6-7, 1990, pages 407-415, XP002316190
WEICKERT M J ET, AL: "Optimization of Heterologous Protein Production in Escherichia Coli", Current opinion in Biotechnology. London, GB, Vol. 7, no. 5, 1996, pages 494-499, XP000995157
HUMPHREYS D P ET AL: "High- LEVEL Periplasmic Expression in Escherichia coli Using a Eukaryotic Signal Peptide: Importance of Codon usage at the 5' end of the coding sequence" Protein expression and purification academic press, San Diego, CA, US, Vol. 20, no.2, November 2000, pgs

EXAMINER

DATE CONSIDERED

^{*}EXAMINER: Initial of reference considered, whether or not citation is in conformance with MPEP 609: Draw a line through citation if not in conformance and not considered. Include a copy of this form with the next communication to applicant.

FORM PTO-1449 (REV. 7-85)

JUL V 5 2006

U.S. DEPARTMENT OF COMMERCE PATENT AND TRADEMARK OFFICE

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OTHER DOCUMENTS (Including Author, Title, Date, Pertinent pages, Etc.)

INITIAL		
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	DC	DALMORA S ET AL: "Analysis of recombinant human growth hormone directly in osmotic shick fluids" Journal of Chromotography A, Elsevier Science, NL., Vol.s 782, no. 2, 10 October 1997, pages 199-210, XP004096275
	DD	ANDERSON D C ET AL: "Production technologies for monoclonal antibodies and their fragments" Current opinion in Biotechnology, Vol 15, No. 5, October 2004, Pages 456-462
	DE	DE OLIVEIRA J E ET AL: "High-yeild purification of biosynthetic human growth hormone secreted in Escherichia coli periplasmic space" Journal of Chromatogrpahy A, Elsevier Science, NL. Vol. 852, no.2 13, Aug 1999, pgs 441-450
	DF	HANNIG G ET AL:" Strategies for optimizing heterologous protein expression in Escherichia coli", Trends in Biotechnology, Vol. 16, no. 2., February 1998, pages 54-60, XP004107042
	DG	MIDDLEBERG A P J: "Process-scale disruption of microorganisms" Biotechnology Advances, Vol. 13, no.3 1995, pages 491-551, XP004045404
	DH	BANEYX F: Recombinant protein expression in Escherichia coli" current opinion in Biotechnology, vol 10, no. 5, October 1999, pgs 411-421, XP001041299
	DI	HART R A ET AL: "Large scale, in situ isolation of periplasmic IGF-I from E. Coli", Bio Technology, Vol. 12, November 1994, pages 1113-1117, XP001153305
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	DL	
	DM	
	DN	
EXAMINE	R	DATE CONSIDERED

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